

rifle levelled on the elephant. The elephant neither moved nor gave any signs of ruffled feelings: it was the local Government Timber Elephant.

HONNAMETTI ESTATE,

R. C. MORRIS.

July 10, 1929.

VIII.—ELEPHANT TUSK WEDGED IN A TREE

I have had brought to me to-day the broken tip end of an elephant's tusk which a Sholaga found tightly wedged in the fork of a limb of a tree. The piece is about 18" long and the tip has been badly scored on both sides as if the elephant had been thrusting it between rocks, or crevices of rocks, or rubbing both sides against a rock, and this, combined with the fact that the tusk was broken off in a tree, seems to me to indicate that the elephant was possibly suffering a good deal of pain from an abscess, or a suppurating wound at the root of the tusk, and had been attempting to ease the pain in the manner above described.

HONNAMETTI ESTATE,

R. C. MORRIS.

September 30, 1929.

IX.—THE DISTRIBUTION OF WILD BUFFALO IN ORISSA

(With a photo and a map)

I have noticed in books on sport and natural history that the 'coastal districts of Orissa' are often quoted as one of the habitats of the Indian Wild Buffalo (*Bubalis bubalis*). However true this may have been in the earlier days of last century, when buffalo frequented the neighbouring district of Midnapore in Bengal and parts of Balasore district as well, it is no longer a fact.

Orissa is composed of the three coastal districts of Balasore, Cuttack and Puri together with the Feudatory States lying between them and the Central Provinces.

Although buffalo undoubtedly had a much wider range in Orissa in former times, they are no longer met with in any of the above coastal districts and it must be many years since they became extinct there, although it is said that buffalo were to be found in Balasore district until twenty-five or thirty years ago. The few remaining herds are confined to Patna State on the borders of Raipur district of the Central Provinces, where they are found in two groups. There are some forty to fifty animals which frequent a locality within ten miles of the C.P. border, and a smaller herd of about fifteen individuals forty miles further east. It seems possible that the first named buffalo might join up with the herds in the south of Raipur district, but the local people assert that they do not.

A few wanderers are said to cross into the west of Sambalpur district from Raipur occasionally. It is, however, many years since any have been shot in the district, and they must be rare visitors in any case.

Although the area referred to is now included in Orissa, prior to 1905 both Patna State and Sambalpur district formed part of the Central Provinces.

The jungle frequented by these animals is extremely dry and to a great extent covered with a heavy growth of grass, which is three to four feet in height, in the early part of the cold weather. The forest consists mainly of small trees and saplings, and is rather open for the most part; so that when the grass dies down in the hot weather the cover becomes very thin. The waterholes and wallows cease to exist after the beginning of March and during the summer months the buffalo resort to the village tanks in the vicinity and wallow there by night, showing an astonishing disregard for the proximity of human beings. In fact their attitude at times is one of decided truculence.

On my first visit to this area I was surprised to find the buffalo affecting such dry and comparatively open jungle, as I was under the impression that they frequented damp and even swampy localities. It is of course possible that these forests were moister and more extensive in earlier times before the spread of cultivation and that the existing conditions are not really favourable to the existence of the buffalo. It struck me as remarkable to find such large animals in such dry and comparatively open jungle.

I have on several occasions seen these buffalo and I cannot say that I have found them wary, it being generally a fairly simple matter to approach within seventy or eighty yards of them. It is, however, difficult to distinguish the bulls from the cows at a distance, as the latter appear to be equally bulky and their horns are as long though not so massive as those of the bulls. It is on the whole better to avoid the herds and to seek out the solitary bulls if one is in search of a good head.

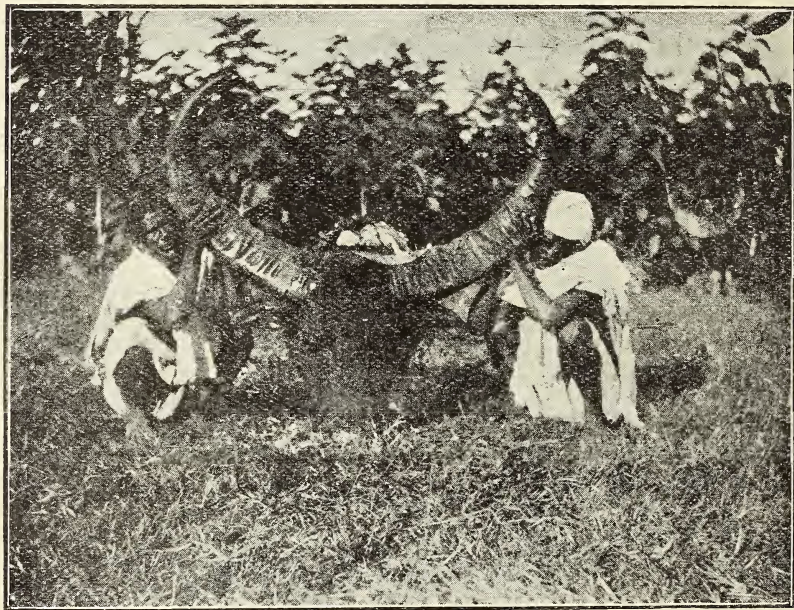
The accompanying photograph is of a bull shot in November, 1924. The horns, although not of great length, are massive. The measurements may be of interest and were as follows:—Height at withers (measured from heel) 64"; length of body along curve of spine 10 feet; tail 28"; girth behind shoulder 92"; girth of neck immediately behind ears 59"; girth of front thigh 23"; front cannon bone 11"; length of ear 13". Greatest spread of horns outside 50"; ditto inside 42"; length of right horn along outer curve 42½"; ditto left horn 43½"; girth of right horn 20"; girth of left horn 19½"; tip to tip 37"; tip to tip around outer curve and across forehead 98". Both horns were somewhat worn at the points.

A remarkably fine head shot in the same forest in 1919 had the following measurements:—Tip to tip across forehead 124", length of right horn 53½", length of left horn 52½", girth of right horn 18½", of left horn 20", tip to tip 48".

The buffalo in Patna State are, strictly speaking, the easterly outliers of the herds in Raipur district and Bastar State of the

Central Provinces. That buffalo were formerly more numerous and extended further east is unquestionable, and most probably their habitat extended from the C. P. through Orissa into Bengal at one time. In fact, there was at least one herd in Gangpur State near the Brahmani river until the early nineties of last century, when these few survivors were exterminated at the time of the construction of the Bengal Nagpur Railway main line.

Steps have been taken to preserve these fine animals in Patna



HEAD OF BULL BUFFALO SHOT IN NOVEMBER 1924

State and their shooting is strictly prohibited. They have been definitely on the increase during the past six or seven years and it is hoped that the construction of the Raipur-Vizianagram Railway through the area inhabited by them will not lead to any diminution in their numbers.

It is of interest that the smaller herd in the south-east of the State is showing a definite tendency to migrate south to an extensive and well-watered forest some forty miles away in Kalahandi State. They have crossed the Tel river every rains for the past three or four years, and on each occasion they have wandered further, and their stay has been more prolonged. It looks as if they are seeking a retreat more secluded than their present surroundings, where jungle is being steadily reclaimed for cultivation.

SAMBALPUR, B.N.RV.,
July 1, 1929.

H. F. MOONEY,
I.F.S.